PATENT
670001-2002.5

AMENDMENT

Kindly amend the application, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

IN THE CLAIMS:

Kindly amend the claims, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows:

1. (Currently Amended) A polypeptide selected from the group consisting of

(a) a fusion polypeptide which comprises a first amino acid sequence including at least one stretch of amino acids constituting a T-cell epitope from the *M. tuberculosis* protein ESAT-6 comprising at least 6 amino acids of SEQ ID NO: 1 and a second amino acid sequence including at least one stretch of amino acids constituting a T-cell epitope from the *M. tuberculosis* protein Ag85B comprising at least 6 amino acids of SEQ ID NO: 2 said first and second amino acid sequences optionally being fused via a linker sequence;

(b) a polypeptide comprising an amino acid sequence analogue having at least 70% sequence identity to the sequence in (a) and at the same time being immunogenic; and

(c) a fusion polypeptide which comprises a first amino acid sequence having at least 70% sequence identity to the first amino acid sequence in (a) and at the same time being immunogenic, and a second amino acid sequence having at least 70% sequence identity to the second amino acid sequence in (a) and at the same time being immunogenic, said first and second amino acid sequences optionally being fused via a linker sequence.

2. (Original) A polypeptide according to claim 1, wherein the degree of sequence identity is at least 75%.

3. (Original) A polypeptide according to claim 1, wherein the first amino acid sequence is situated C-terminally to the second amino acid sequence.

4. (Original) A polypeptide according to claim 1, wherein the first amino acid sequence is situated N-terminally to the second amino acid sequence.

5. (Original) A polypeptide according to claim 1, wherein no linkers are introduced between the two amino acid sequences in (a) or (c).

6. (Original) A polypeptide according to claim 1, which is Ag85B fused N- or C-terminally to ESAT-6.

7. (Original) A polypeptide according to claim 1, which is lipidated so as to allow a self-adjuvating effect of the polypeptide.

8. Cancelled.

9. (Currently Amended) A method for preparing a pharmaceutical composition~~, e.g.~~ for the vaccination against infections caused by ~~virulent mycobacteria, e.g. by~~ *Mycobacterium tuberculosis*, ~~*Mycobacterium africanum* or *Mycobacterium bovis*~~, said method comprising preparing, synthesizing or isolating a polypeptide according to ~~wherein the pharmaceutical composition comprises the polypeptide of~~ claim 1.

10. (Original) An immunogenic composition comprising a polypeptide according to claim 1.

11. (Currently Amended) An immunogenic composition according to claim 10, which is in the form of a vaccine against *Mycobacterium tuberculosis*.

12-20. Cancelled.

21. (Currently Amended) A method for producing a polypeptide according to claim 1, comprising

(a) inserting a nucleic acid fragment comprising a nucleic acid sequence that encodes a polypeptide as defined in claim 1, or comprising a nucleic acid sequence complementary thereto, into a vector which is able to replicate in a host cell, introducing the resulting recombinant vector into the host cell, culturing the host cell in a culture medium under conditions sufficient to effect expression of the polypeptide, and recovering the polypeptide from the host cell or culture medium;

(b) isolating Ag85B and ESAT-6 from ~~a whole mycobacterium, e.g.~~ *Mycobacterium tuberculosis*, *Mycobacterium africanum* or *Mycobacterium bovis*, from culture filtrate or from lysates or fractions thereof, and fusing the polypeptides;

(c) synthesizing the polypeptide e.g. by solid or liquid phase peptide synthesis; or

(d) a combination of the methods in (a), (b) and/or (c).

22. Cancelled.

23. (Previously Presented) A pharmaceutical composition which comprises an immunologically responsive amount of at least one member selected from the group consisting of:

(a) a fusion polypeptide which comprises a first amino acid sequence including at least one stretch of amino acids constituting a T-cell epitope from the *M. tuberculosis* protein ESAT-6, and a second amino acid sequence including at least one stretch of amino acids constituting a T-cell epitope from the *M. tuberculosis* protein Ag85B, said first and second amino acid sequences optionally being fused via a linker sequence;

(b) a polypeptide comprising an amino acid sequence which has a sequence identity of at least 70% to any one of said polypeptides in (a) and at the same time being immunogenic; and

(c) a fusion polypeptide comprising at least one polypeptide or amino acid sequence according to (a) or (b) and at least one fusion partner.

24. Cancelled.

25. (Currently Amended) An immunogenic composition according to claim 10 or pharmaceutical composition according to claim 23, characterized in that said immunogenic ~~composion/pharmaceutical~~ composition/pharmaceutical composition can be used prophylactically in a subject not infected with *Mycobacterium tuberculosis* ~~a virulent mycobacterium~~; or therapeutically in a subject already infected with *Mycobacterium tuberculosis* ~~a virulent mycobacterium~~.

26. (Previously Presented) A pharmaceutical composition which comprises an immunologically responsive amount of at least one member selected from the group consisting of:

(a) a fusion polypeptide which comprises a first amino acid sequence including at least one stretch of amino acids constituting a T-cell epitope from the M. tuberculosis protein ESAT-6, and a second amino acid sequence including at least one stretch of amino acids constituting a T-cell epitope from the M. tuberculosis protein AG85B, said first and second amino sequences optionally being fused via a linker sequence;

(b) a polypeptide comprising an amino acid sequence which has a sequence identity of at least 70% to any one of said peptides in (a) and at the same time being immunogenic; and

(c) a fusion polypeptide comprising at least one polypeptide or amino acid sequence according to (a) or (b) and at least one fusion partner.

27. (Currently Amended) Immunogenic composition according to claim 10 or pharmaceutical composition according to claim 26, characterized in that said immunogenic composition/pharmacuetical composition can be used prophylactically in a subject not infected with *Mycobacterium tuberculosis* ~~a virulent mycobacterium~~; or therapeutically in a subject already infected with *Mycobacterium tuberculosis* ~~a virulent mycobacterium~~.

28. (Previously Presented) A method for producing a polypeptide according to claim 1, comprising

(a) inserting a nucleic acid fragment which comprises a nucleic acid sequence which encodes the polypeptide, or which comprises a nucleic acid sequence complementary thereinto a vector which is able to replicate in a host cell, introducing the resulting recombinant vector into the host cell, culturing the host cell in a culture medium under conditions sufficient to effect expression of the polypeptide, and recovering the polypeptide from the host cell or culture medium; or

(b) isolating Ag85B and ESAT-6 from a whole mycobacterium, from culture filtrate or from lysates or fractions thereof, and fusing the polypeptides;

(c) synthesizing the polypeptide e.g. by solid-phase or liquid-phase peptide synthesis; or

(d) a combination of the methods in (a), (b), and/or (c).

29. (Previously Presented) The method of claim 28 wherein the mycobacterium is *Mycobacterium tuberculosis*, *Mycobacterium africanum*, or *Mycobacterium bovis*.

30. (Previously Presented) The polypeptide according to claim 1 which contains a T-cell epitope of ESAT-6 and a T-cell epitope of Ag85B.

31. Cancelled.

32. (New) A polypeptide comprising a fusion polypeptide which comprises a first amino acid sequence including at least one stretch of amino acids constituting a T-cell epitope from the *M. tuberculosis* protein ESAT-6 comprising at least 6 amino acids of SEQ ID NO: 1 and a second amino acid sequence including at least one stretch of amino acids constituting a T-cell epitope from the *M. tuberculosis* protein Ag85B comprising at least 6 amino acids of SEQ ID NO: 2 wherein AG85B is fused N- or C-terminally to ESAT-6.

33. (New) The polypeptide of claim 32, wherein Ag85B is fused C-terminally to ESAT-6.

34. (New) The polypeptide of claim 33, wherein the polypeptide is ESAT-6-Ag85B.

35. (New) An immunogenic composition comprising the polypeptide of claim 32.

36. (New) An immunogenic composition comprising the polypeptide of claim 33.

37. (New) An immunogenic composition comprising the polypeptide of claim 34.